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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/361,803	07/27/1999	MITSUHIRO KUNIEDA	35.G2440	5976

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EXAMINER

RODEE, CHRISTOPHER D

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 11/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/361,803

Applicant(s)

KUNIEDA ET AL.

Examiner

Christopher RoDee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in US Patent Application Publication 2004/0214101 in view of Organic Photoreceptors for Imaging Systems to Borsenberger, pp. 6-19, 181, 182 & 203-211, and further in view of JP 01-84265, or Kawamorita *et al.* in US Patent 5,202,214, or Kovacs in US Patent 5,373,313.

This rejection was presented in the last Office action. Applicants traverse the rejection based on the evidence in the specification for the combination of the azo pigment and triarylamine in the charge generation layer and the charge transport layer, respectively. Applicants also take the position that Suzuki is concerned with providing high sensitivity and flat spectral sensitivity in a broad wavelength range. Suzuki obtains this through a combination of azo and phthalocyanine pigments. Suzuki also discloses over 36 different classes or types of hole transport compounds, according to applicants. According to applicants, Examples 1, 4, 11, 14, 17, 27, 35, and 41 use triaryl amine compounds similar in structure to Comparative Example 1. Borsenberger is also criticized as not providing sufficient motivation to select tri-p-tolylamine or triphenylamine as hole transport compounds for use in Suzuki.

The Examiner has carefully considered applicants' remarks. Applicants are correct that Suzuki does not specifically disclose the hole transport compounds of the instant claims. However, triarylamines are specifically referenced as effective hole transport materials for the reference's photoreceptor (¶ [0084]). Further, Borsenberger teaches conventional hole

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transport compounds noting that arylamines are common in the art (p. 181). Specific common arylamines are tri-p-tolylamine and triphenylamine (pp. 203-211). Although the artisan would have to select the tri-p-tolylamine or triphenylamine of Borsenberger as the hole transport compounds in Suzuki, the fact that Suzuki teaches that triarylamines are effective combined with the teaching in Borsenberger that arylamines, such as tri-p-tolylamine and triphenylamine, are exceedingly well known in the art and well studied would provide ample motivation for the artisan to arrive at the claimed invention. This is not the situation where the hole transport compounds are unusual or obscure. Arylamines such as tri-p-tolylamine and triphenylamine are exceedingly well known, as shown by the Borsenberger text. The use of such well known materials for their known function when that function is called upon by the primary reference provides sufficient motivation for the artisan to arrive at the claimed invention.

The evidence in the specification has been carefully considered but the Examiner cannot agree that the triarylamine compounds in the specification examples are sufficiently close to those of Suzuki to make a proper comparison. Suzuki's hole transport compounds are triarylamines with a stilbene group attached to one of the phenyl rings (see ¶ [0118]). The specification evidence presents a triarylamine with a hydrazone substituent in Comparative Compound 1 or a monoarylamine with a hydrazone group in Comparative Compound 2. These comparative compounds are substantially different from the compounds in Suzuki. Although they are all hole transport compounds, there is no apparent reason, nor has one been advanced by applicant, why the Comparative Compounds are representative of Suzuki's charge transport compounds. Further, these compounds do not appear to be closer to the claimed invention than Suzuki. As a result, the comparative photoreceptors are not representative of the prior art.

The comparative evidence also provides transmittance data at one wavelength: 380 nm while the instant claims are directed to transmittance at a much broader range of wavelengths:

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380 nm to 500 nm. Suzuki specifically discloses testing its photoreceptor at 500 nm, which is within the scope of the claims. No data is present at this wavelength or at other wavelengths reasonably commensurate in scope with the claims.

The rejection is still seen as proper and is maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher RoDee whose telephone number is 571-272-1388. The examiner can normally be reached on most weekdays from 6:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



CHRISTOPHER RODEE
PRIMARY EXAMINER

cdr
3 November 2005